Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

Claim 1 (Canceled)

Claim 2 (Currently amended): An apparatus for exercising semiconductor devices, said apparatus comprising:

a plurality of semiconductor devices, each comprising a plurality of elongate, spring connection elements;

a support substrate comprising a plurality of terminals;

test connection means for connecting said terminals to a test device;

a plurality of socket substrates disposed on said support substrate, each said socket comprising a plurality of sockets and a plurality of traces, each said trace electrically connected to one of said sockets;

means for electrically connecting ones of said traces with ones of said terminals; and

means for pressing ones of said spring connection elements against ones of said sockets, wherein said spring connection elements generate spring counterforces and thereby form pressure connections with said sockets,

wherein said plurality of semiconductor devices are dies of an unsingulated semiconductor wafer.

Claim 3 (Canceled)

Claim 4 (Currently amended): The apparatus of ~~claim 3~~ claim 2, wherein each socket substrate corresponds to one of said dies.

Claim 5 (Currently amended): The apparatus of ~~claim 3~~ claim 2, wherein said support substrate is part of a probe card assembly.

Claim 6 (Previously presented): The apparatus of claim 5, wherein said support substrate is electrically connected through an interposer to a probe card, and wherein said support substrate, said interposer, and said probe card compose said probe card assembly.

Claim 7 (Canceled)

Claim 8 (Previously presented): The apparatus of claim 2, wherein said test device provides test signals to test a functionality of said semiconductor devices.

Claim 9 (Previously presented): The apparatus of claim 2, wherein said test device provides power to said semiconductor devices, and further comprising a temperature control device disposed to control a temperature of said semiconductor devices.

Claim 10 (Currently amended): The apparatus of claim 9, wherein said temperature control device comprises:

a first thermal chuck in thermal contact with said semiconductor devices; and

a second thermal chuck in thermal ~~connect~~ contact with said socket substrates.

Claim 11 (Previously presented): The apparatus of claim 2, wherein said socket substrates are disposed in rows on said support substrate, and further comprising a plurality of power lines disposed on said support substrate, each said power line corresponding to one of said rows of socket substrates and supplying power to every socket substrate in said row.

Claim 12 (Previously presented): The apparatus of claim 11, further comprising a plurality of isolation resistors, each said isolation resistor disposed between one of said power lines and one of said socket substrates.

Claim 13 (Currently amended): The apparatus of claim 2, wherein said means for ~~securing~~ pressing comprises one of a test head or a vacuum chuck.

Claim 14 (Previously presented): The apparatus of claim 2, wherein said means for electrically connecting ones of said traces with ones of said terminals comprise a plurality of bond wires, each said bond wire bonded to one of said traces and to one of said terminals.

Claim 15 (Previously presented): The apparatus of claim 2, wherein said sockets comprise pits etched into a surface of a corresponding socket substrate.

Claim 16 (Previously presented): The apparatus of claim 2, wherein said socket substrate comprises silicon.

Claim 17 (Currently amended): A test socket apparatus comprising:

~~a support substrate comprising a plurality of terminals;~~

~~test connection means for connecting said terminals to a test device;~~

a ~~socket substrate disposed on said support substrate and~~ contactor comprising a plurality of sockets ~~and a plurality of traces, each said trace electrically connected to one of said sockets~~ configured to receive and make electrical connections with elongate spring connection elements attached to die terminals of at least one die of an unsingulated semiconductor wafer; and

test connection means for ~~electrically~~ connecting ~~ones of said traces~~ said contactor with ~~ones of said terminals; and~~

~~means for pressing elongate spring connection elements disposed on a semiconductor device against said sockets such that said spring connection elements generate spring counterforces and thereby form pressure connections with said sockets~~ a test device.

Claim 18 (Currently amended): The apparatus of claim 17, wherein said test device provides test signals to test a functionality of said ~~semiconductor device~~ at least one die.

Claim 19 (Currently amended): The apparatus of claim 17, wherein said test device provides power to said ~~semiconductor device~~ at least one die, and further comprising thermal means for controlling a temperature of said ~~semiconductor device~~ at least one die.

Claim 20 (Currently amended): The apparatus of ~~claim 17~~ claim 39, said means for electrically connecting ones of said traces with ones of said first terminals comprise a plurality of bond wires, each said bond wire bonded to one of said traces and to one of said first terminals.

Claim 21 (Currently amended): The apparatus of claim 17, wherein said sockets comprise pits etched into a surface of said ~~socket substrate~~ contactor.

Claim 22 (Currently amended): The apparatus of claim 17, wherein said ~~socket substrate~~ contactor comprises silicon.

Claim 23 (Previously presented): The apparatus of claim 17 further comprising a plurality of said socket substrates.

Claims 24-36 (Canceled)

Claims 37 (Currently amended): The apparatus of claim 2, wherein the plurality of elongate, spring connection elements have a pitch [[off]] of less than about 5 mils.

Claim 38 (Previously presented): The apparatus of claim 17, wherein the elongate spring connection elements have a pitch of less than about 5 mils.

Claim 39 (New): The apparatus of claim 17, further comprising means for pressing ones of said elongate spring connection elements attached to said die terminals against ones of said sockets such that said spring connection elements generate spring counterforces and thereby form pressure connections with said sockets, and

wherein:

said contactor comprises:

a support substrate comprising a plurality of first terminals,

a socket substrate disposed on said support substrate and comprising ones of said sockets and a plurality of traces electrically connected to said ones of said sockets, and

means for electrically connecting ones of said traces with ones of said first terminals; and

said test connection means connects said first terminals to said test device.

Claim 40 (New): The test socket of claim 17, wherein:

said contactor comprises a central region and a peripheral region disposed along a periphery of said contactor enclosing said central region,

said test connection means comprises first terminals disposed within said peripheral region, and

said sockets are disposed within said central region.

Claim 41 (New): The test socket of claim 17, wherein said contactor comprises a first substrate and a second substrate attached to said first substrate.

Claim 42 (New): The test socket of claim 41, wherein said contactor comprises a plurality of second substrates attached to said first substrate.

Claim 43 (New): The test socket of claim 41, wherein said sockets are disposed on said second substrate.

Claim 44 (New): The test socket of claim 43, wherein said sockets comprise pits formed in said second substrate.

Claim 45 (New): The test socket of claim 44, wherein said pits comprise an electrically conductive material.

Claim 46 (New): The test socket of claim 17, wherein said test connection means comprises a probe card assembly.

Claim 47 (New): The test socket of claim 46, wherein said probe card assembly comprises a probe card and an interposer for electrically connecting said contactor to said probe card.

Claim 48 (New): The test socket of claim 47, wherein said contactor comprises a socket substrate attached to a interconnection substrate, which is electrically connected to said interposer.

Claim 49 (New): The test socket of claim 48, wherein said sockets comprise pits etched into said socket substrate.